

*Juglans cinerea* was found in abundance near Forest City, St. Francis Co., on Crowley's Ridge, growing along with *Magnolia acuminata*, *Liriodendron Tulipifera* and *Fagus ferruginea*. The latter attains a diameter of over three feet. It was also found in Clark, Ouachita, Columbia, Union, Miller, Nevada, Hot Springs, Dallas, and formerly in Hempstead counties.

*Ostrya Virginica* is very common as far southwest as the border of the State.

*Juniperus Virginiana* was found as far southwest as Hempstead county.

*Castanea pumila* attains a remarkable size in Hempstead Co., on the sandy soil of the Tertiary. A tree in the suburbs of Washing measured 13 feet 8 inches, one foot from the bottom, and several trees were observed over 3 feet in diameter.

There was a specimen of *Juglans nigra* formerly standing in the Red River bottom, of which only the stump now remains. This tree was measured by Col. Graliot (Col. 2d Ark. Infantry), now County Surveyor of Hempstead Co. It took 45 paces (?) to go around the tree, and 5 feet above the roots the Colonel could just hold together, with extended arms, the ends of a 33 foot chain, making the circumference at least 38 feet.

The genus *Crataegus* is represented by a large number of species in N. W. Arkansas.

The genus *Carya* is represented by seven, if not the eight, N. Am. species.—F. L. HARVEY, *Ark. Ind. Univ. Fayetteville, Ark.*

“SAXIFRAGA UMBROSA” ADORNED WITH BRILLIANT COLORS BY THE SELECTION OF SYRPHIDÆ.—Among Diptera the most assiduous visitors of flowers are certain Syrphidæ, which, elegantly colored themselves, are fond of splendid flower colors, and before eating pollen or sucking nectar, like to stop awhile, hovering free in the air, in front of their favorites, apparently fascinated, or at least delighted, by the brilliancy of their colors. Thus I repeatedly observed *Syrphus balteatus* hovering before the flowers of *Verbascum nigrum*, often *Melanostoma mellina*, and *Ascia podagrica* before *Veronica chamædrys*; in the Alps the lark *Sphægma clunipes* before *Saxifraga rotundifolia*, and in my garden *Ascia podagrica* before *Saxifraga umbrosa*. Of *Verbascum nigrum* the main fertilisers are humble-bees, Diptera co-operating only in a subordinate degree; in the case of the three other species, on the contrary, the above named Syrphidæ are such frequent visitors and cross-fertilizers that we may safely conclude that it is by their selection of elegantly colored varieties that these flowers have acquired their beautiful peculiarity. Hence, in order to estimate the color-sense of these Syrphidæ, it is worth while to consider what color-combinations they have been able to produce by their selection.

*Saxifraga umbrosa* being, as far as hitherto known, their finest masterpiece, we may in the first place look at the variegated decoration of this species. Its snow-white petals are adorned with colored spots, which in size and intensity of light gradually decrease from the

base of the petals towards their extremity. Indeed, nearest to their base, within the first third of their length, there is a large irregular spot of an intense yellow; about the middle of their length there follows a narrower cross band of red color, vermilion towards the base, intensely pink towards the outside, not reaching the margin of the petals, sometimes dissolved into several separate spots; lastly, beyond the middle of the length of the petals there are three to eight smaller roundish spots of a paler violet pink color. The flowers of *Veronica chamædrys* prove that also gay blue colors are perceived and selected by *Ascia*.—HERMANN MULLER in *Nature*.

CAREX SULLIVANTII.—Mr. E. C. Howe, of Yonkers, West Chester Co., N. Y., writes that he has collected during the present season several specimens of the above *Carex*, and would like to exchange them for some Western Carices, such as *C. Shortiana*, *C. Meadii*, *C. Bebbii*, *C. crus-corvi*, *C. conjuncta*, *C. muricata*, *C. cephaloidea*, or *C. Fraseriana*.

CROSS FERTILIZATION OF BAPTISIA TINCTORIA.—Prof. W. W. Bailey writes in reference to *B. tinctoria* that it is cross fertilized by humble bees. Their weight on the keel causes a quick and decided lateral deflection of the wings, exposing the andræcium. A careful study of this mechanism would be very interesting.

DOWNINGIA PULCHELLA.—In a field east of San Jose I saw last June at least five acres completely carpeted with *Downingia pulchella*. The nearly level ground had been sown with wheat which the April flood "drowned out" in the lowest places. In September the same ground will be covered with cocklebur.

The rare *Mentzelia Lindleyi* is abundant near Alum Rock, seven miles east of San Jose.—V. RATTAN, *San Francisco, Cal.*

NEW LOCALITY FOR SULLIVANTIA OHIONIS.—Happening to spend a day in the eastern part of Cass county, Indiana, I found on the limestone bluffs overhanging Pipe Creek, just before its junction with the Wabash River, *Sullivantia Ohionis* in abundance. The general conformation of the country and the relative situation of *Sullivantia*, are almost exact counterparts of the station in Jefferson Co., Indiana, with the single exception that the bluffs are not nearly so high. The exposure and character of the soil seem to be identical.—M. S. COULTER, *Logansport, Ind.*

SCIENCE —A Weekly Record of Scientific Progress. Illustrated. We have received the initial number of the above journal, which claims to "occupy a field in periodical literature hitherto unoccupied," "and the only first class weekly Journal in the United States devoted to science, recognized by scientists as their medium of communication." Furthermore, all desiring to keep "au courant", or rather